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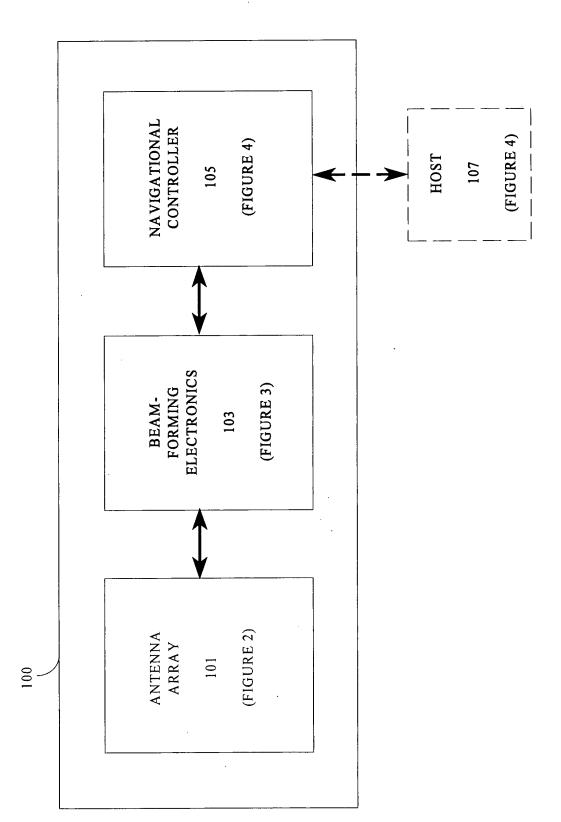


FIGURE 1

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SHEET 2 of 14

FORMING ELECTRONICS (FIGURE 3) TO BEAM-

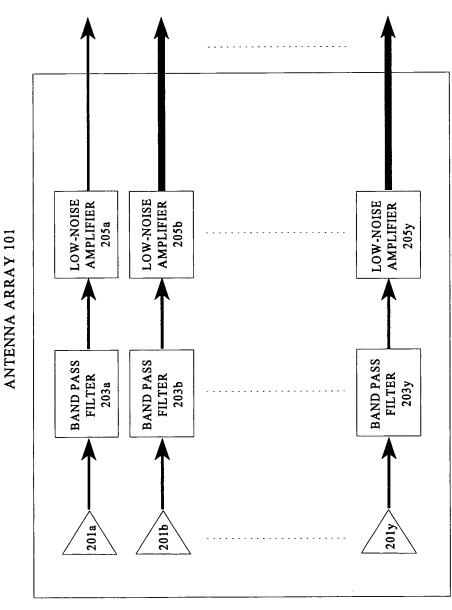


FIGURE 2

ENNA

S.ZEM.
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APPLICATION SERIAL NO: UNASSIGNED

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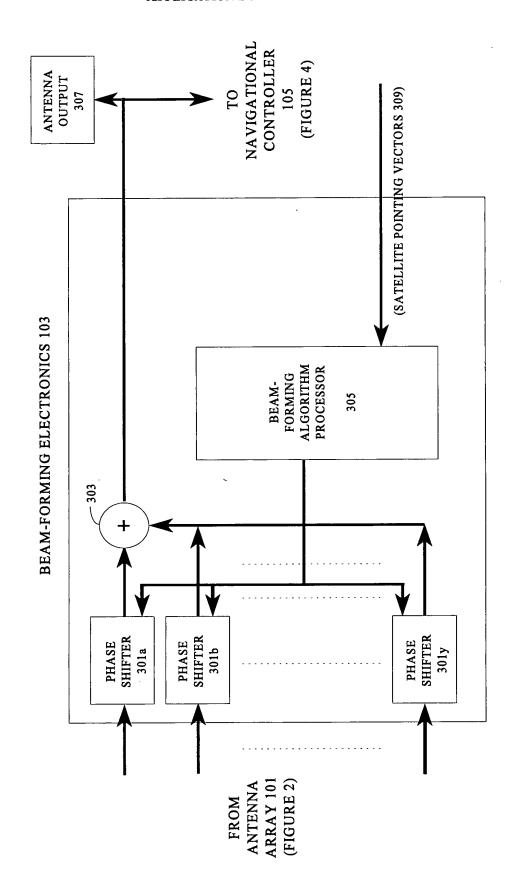


FIGURE 3

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TYPLE: INTERFERENCE REJECTION GPS ANTENNA
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INVENTOR(S): RICHARD KIRCHOFER ET AL.
APPLICATION SERIAL NO: UNASSIGNED

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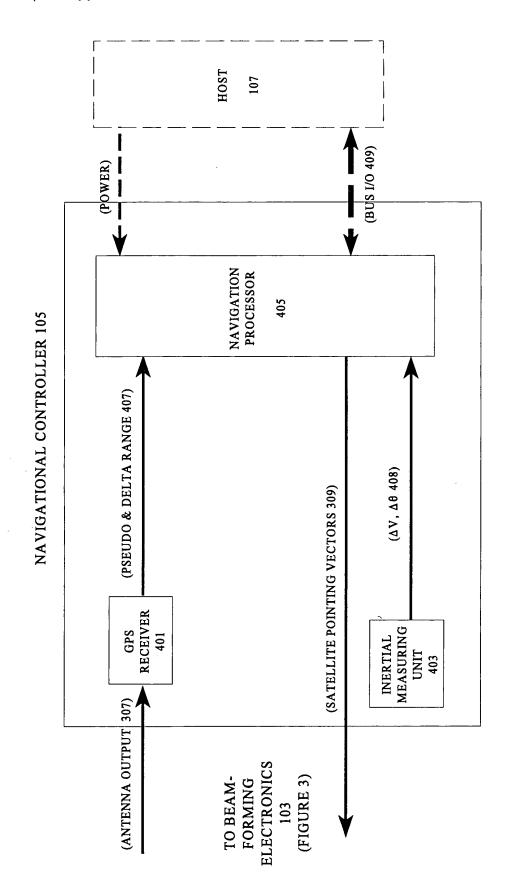


FIGURE 4

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SYSTEM
INVENTOR(S): RICHARD KIRCHOFER ET AL.
APPLICATION SERIAL NO: UNASSIGNED SHEET 5 o

SHEET 5 of 14

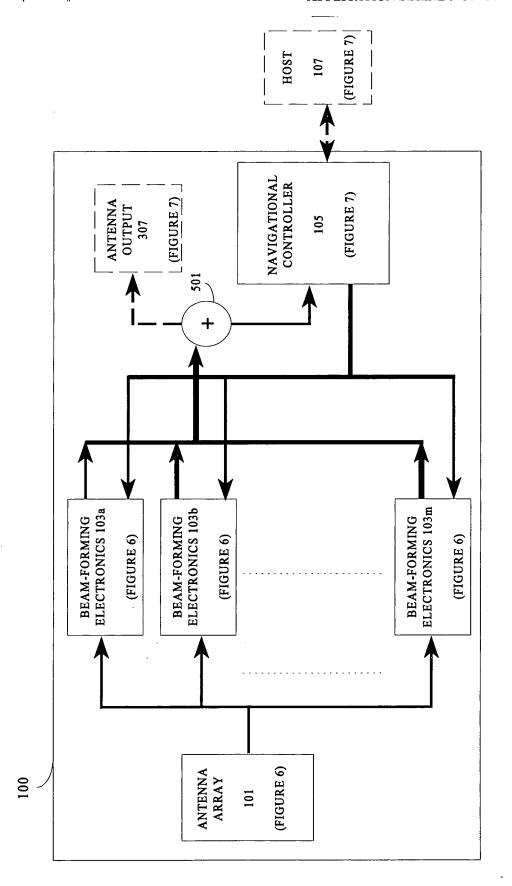


FIGURE 5

DOODHOUS "OVIAOL

APPLN. FILING DATE: JULY 11, 2001
TITLE: INTERFEDENCE REJECTION GPS ANTENNA

SYSTEM

SHEET 6 of 14

(BUS I/O 409) (POWER) NAVIGATION PROCESSOR 405 NAVIGATIONAL CONTROLLER 105 OSSOROSS OZIIOI (PSEUDO & DELTA (ΔV, Δθ 408) **RANGE 407)** INERTIAL MEASURING RECEIVER GPS UNIT 401 403 SHEET 7 of 14 TITLE: INTERFERENCE REJECTION GPS ANTENNA (POINTING VECTOR 309) ANTENNA OUTPUT 307 INVENTOR(S): RICHARD KIRCHOFER ET AL. APPLICATION SERIAL NO: UNASSIGNED APPLN. FILING DATE: JULY 11, 2001 TO BEAM-FORMING ELECTRONICS 103 (FIGURE 6) SYSTEM

HOST

107

FIGURE 7

D990E095 D71101

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TITLE: INTERFORM NCE REJECTION GPS ANTENNA

INVENTOR(S): RICHARD KIRCHOFER ET AL.

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<u>900</u>

oggaege loyatea

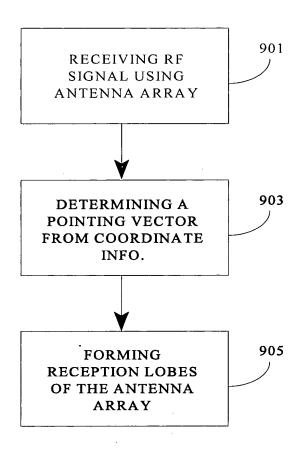


FIGURE 9

APPLN, FILING DATE: JULY 11, 2001
TITLE NTERFERENCE REJECTION GPS AN INA
SYST.

INVENTOR(S): RICHARD KIRCHOFER ET AL.
APPLICATION SERIAL NO: UNASSIGNED SHEET 10 of 14

<u>1000</u> **RECEIVE GPS** 1001 CONSTELLATION **INFORMATION CONVERT GPS** 1003 CONSTELLATION INFO. TO ABSOLUTE COORDINATE INFO. **RECEIVE IMU** 1005 SENSOR **INFORMATION CONVERT IMU** 1007 SENSOR INFO. TO **RELATIVE** COORDINATE INFO. 1009 **CREATE SATELLITE** POINTING VECTOR SEND POINTING 1011

FIGURE 10

VECTORS TO BEAM-FORMING ALGORITHM PROCESSOR PLN. FILING DATE: JULY 11, 2001
LE: INTERFERENCE REJECTION GONTENNA
SYSTEM
INVENTOR(S): RICHARD KIRCHOFER ET AL.

APPLICATION SERIAL NO: UNASSIGNED

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1100

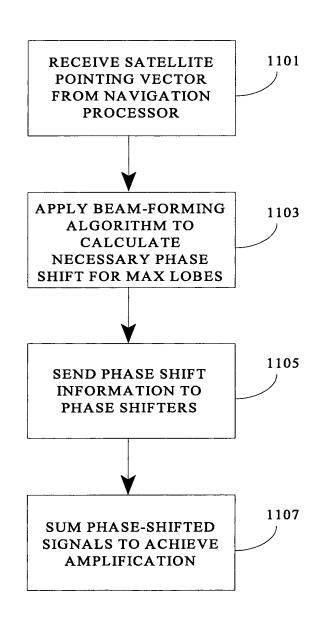


FIGURE 11

APPLN. FILING DATE: JULY 11, 2001
TITE INTERFERENCE REJECTION GPS A

SY M
INVENTOR'(S): RICHARD KIRCHOFER ET AL.
APPLICATION SERIAL NO: UNASSIGNED

SHEET 12 of 14

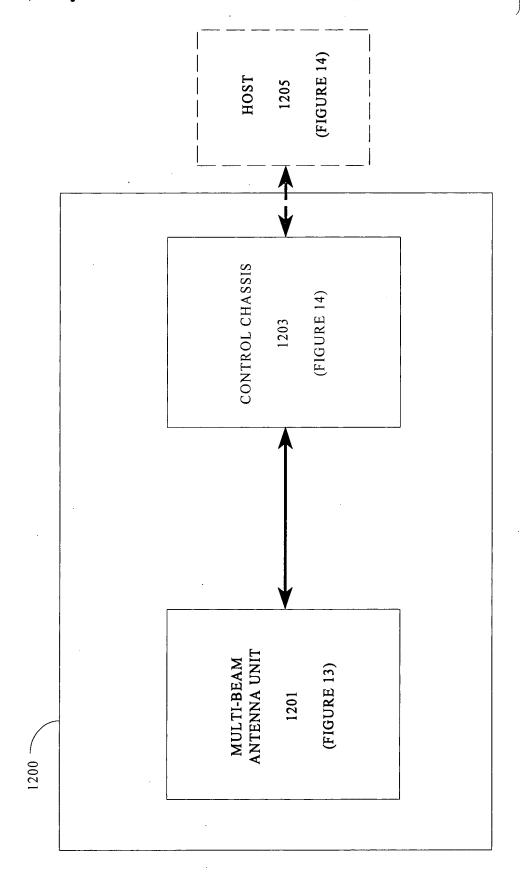


FIGURE 12

APPLN. FILING DATE: JULY 11, 2001 TITLE: INTERFERENCE REJECTION GPS ANTENNA SYSTEM

INVENTOR(S): RICHARD KIRCHOFER ET AL. APPLICATION SERIAL NO: UNASSIGNED



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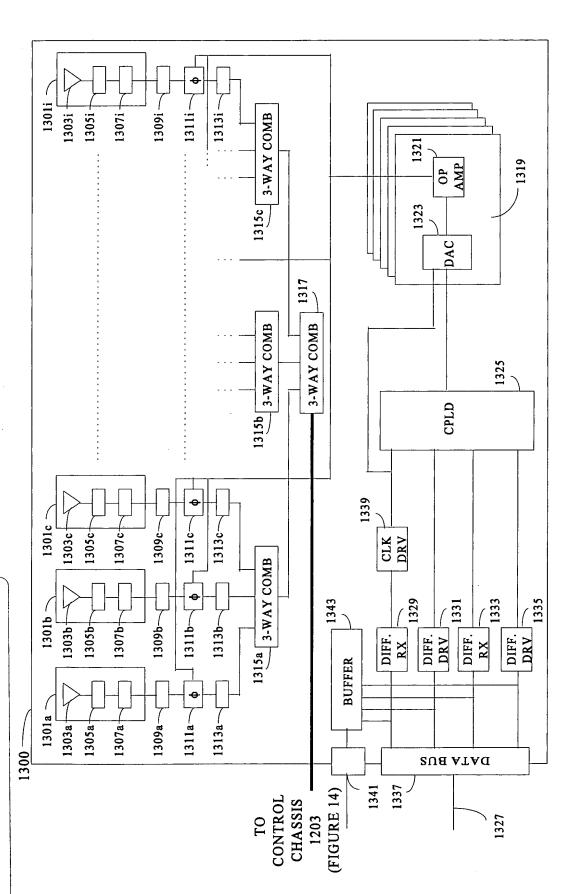


FIGURE 13

rorred sectors 1411 1403 -1415 -1417BYCK FLANE GPS RECEIVER **PROCESSOR VPIC 616** IMU SHEET 14 of 14 1405 -1407 -APPLN. FILING DATE: JULY 11, 2001 TITLE: INTERFERENCE REJECTION GPS ANTENNA 1203 INVENTOR(S): RICHARD KIRCHOFER ET AL. APPLICATION SERIAL NO: UNASSIGNED HOST 1205

FIGURE 14

TO MULTI-

ANTENNA BEAM

UNIT

(FIGURE 13)

1201

-1327

- 1401

MONITOR PROCESSOR

NETWORK

1413

1409